





SPECIMEN

For Laboratory Use Only

Certificate of Analysis

PRODUCT Artemisia annua (Sweet wormwood)

Herb

PART NUMBER 00030633

REFERENCE TYPEBiomass Reference Material (VBRM)*

LOT NUMBER 00030633-272

COMMON NAME Sweet Wormwood

LATIN NAME Artemisia annua L. [Asteraceae]

PLANT PART Leaf

SAMPLE NUMBER CDXA-08-0578

REPORT NUMBER CDXA-VBRMR-077-02

DATE OF SAMPLE 03/25/2008

DATE OF REEVALUATION 03/06/2013 (1st); 06/01/2017 (2nd);

07/19/2021 (3rd)

DATE OF REPORT 08/03/2021

*Note - Vouchered (V) BRM is a voucher specimen

A full-size color voucher copy may be purchased by contacting the ChromaDex sales office



ANALYTICAL RESULTS

TEST	METHOD	RESULT
Appearance	Macroscopy	(1) Whole/Cut: Yellow/green leafy material
Appediance	Macroscopy	(2) Milled: green powder and tan fibers
Anatomy/Morphology	Microscopy (400x)	Small multicellular thin walled trichome
Andromy/Morphology	Microscopy (400x)	showing broken tip
HP-TLC	See HP-TLC conditions	Conforms

STORAGE CONDITIONS

STORAGE 20-30 °C; Dry storage area; Insect free; Volatile free

EXPIRATION DATE 07/2026 under the above conditions

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MACROSCOPY

(1)



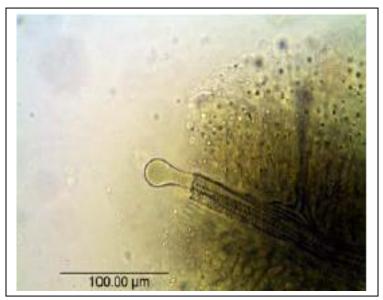


(2)

MICROSCOPY

(1) (2)





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HP-TLC CONDITIONS

STATIONARY PHASE Silica gel 60, HPTLC plates

SAMPLE PREPARATION 0.3 g + 3 mL Methanol, sonicate/heat at 50 °C for 30 min.

MOBILE PHASE Ethyl acetate: Acetic acid: Formic Acid: Water

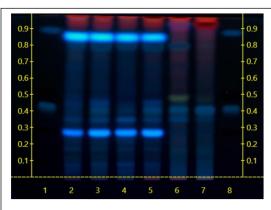
[10/0.9/0.9/2]

DETECTION (1) UV 366 nm

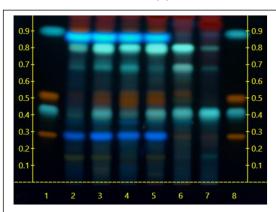
(2) Natural Product + Polyethylene Glycol, 366 nm

HP-TLC PLATES





HP-TLC (2)



HP-TLC LANE APPLICATIONS

Lane	ID		Lane	ID
1	Rutin, Hyperoside, Chlorogenic acid, Caffeic acid, Methanol (2 µL) Artemisia annua (herb (leaf, stem)) (6 µL) Artemisia annua (herb) (6 µL)		5	Artemisia annua VBRM (6 µL)
2			6	Artemisia vulgaris (herb) (6 µL)
3			7	Artemisia absinthium (leaf) (6 μL)
4	N/A		8	Rutin, Hyperoside, Chlorogenic acid, Caffeic acid, Methanol (2 µL)

REVISION HISTORY

Revision History	Date of Revision	<u>Document/Changes</u>
00	03/06/2013	New report. Passed re-evaluation.
01	07/11/2017	Passed re-evaluation; updated expiration date; updated detection; general template update
02	08/03/2021	Material passed reevaluation by HP-TLC. Updated expiration date, template, HP-TLC method conditions, plates, and lane applications.

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